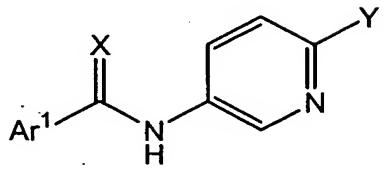
WHAT IS CLAIMED IS:

1. A compound having the formula:



wherein,

Ar^1 is a member selected from the group consisting of aryl, substituted aryl, heteroaryl and substituted heteroaryl;

X is a member selected from the group consisting of O, S and N-R^1,

wherein, R^1 is a member selected from the group consisting of H, $(C_1\text{-}C_8)$alkyl, substituted $(C_1\text{-}C_8)$alkyl, heteroalkyl, substituted heteroalkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl$(C_1\text{-}C_4)$alkyl, substituted aryl$(C_1\text{-}C_4)$alkyl, CN, $-C(O)R^2$, $-OR^3$, $-C(O)NR^3R^4$, and $-S(O)_2NR^3R^4$;

wherein, R^2 is a member selected from the group consisting of $(C_1\text{-}C_8)$alkyl, substituted $(C_1\text{-}C_8)$alkyl, cycloalkyl, substituted cycloalkyl, heteroalkyl, substituted heteroalkyl, heterocyclyl, substituted heterocyclyl, alkaryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl$(C_1\text{-}C_4)$alkyl and substituted aryl$(C_1\text{-}C_4)$alkyl;

R^3 and R^4 are each members independently selected from the group consisting of hydrogen, $(C_1\text{-}C_8)$alkyl, substituted $(C_1\text{-}C_8)$alkyl, cycloalkyl, substituted cycloalkyl, heteroalkyl, substituted heteroalkyl, heterocyclyl, substituted heterocyclyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl$(C_1\text{-}C_4)$alkyl and substituted aryl$(C_1\text{-}C_4)$alkyl, or R^3 and R^4 can be combined with the nitrogen to which each is attached to form a 5-, 6- or 7-membered ring optionally having additional heteroatoms at the ring vertices; and

Y is a member selected from the group consisting of halogen, $C_1\text{-}C_4$ alkyl, $C_1\text{-}C_4$ substituted alkyl, $-OCH_3$ and $-OCF_3$.

2. The compound according to claim 1, wherein Ar^1 is a member selected from the group consisting of phenyl, substituted phenyl, indolyl, substituted indolyl, benzofuranyl, substituted benzofuranyl, furanyl, substituted furanyl, thienyl, substituted thienyl, isothiazolyl, substituted isothiazolyl, pyrazolyl and substituted pyrazolyl.

3. The compound according to claim 2, wherein Ar^1 is a member selected from the group consisting of substituted phenyl, substituted or unsubstituted 2-indolyl and substituted or unsubstituted 2-thienyl.

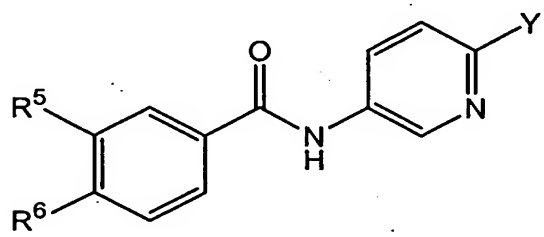
4. The compound according to claim 3, wherein X is O.

5. The compound according to claim 3, wherein the Ar^1 substituents are selected from the group consisting of halogen, alkyl, halo(C_1-C_4)alkyl, (C_1-C_4)alkoxy, halo(C_1-C_4)alkoxy, nitro, cyano, $-NR^7C(O)R^8$, $-NR^7R^8$, phenyl and substituted phenyl, wherein

R^7 and R^8 are members independently selected from hydrogen, (C_1-C_8)alkyl, substituted (C_1-C_8)alkyl, cycloalkyl, substituted cycloalkyl, heteroalkyl, substituted heteroalkyl, heterocyclyl, substituted heterocyclyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl(C_1-C_4)alkyl and substituted aryl(C_1-C_4)alkyl, or R^7 and R^8 taken together with the nitrogen to which each is attached form a 5-, 6- or 7-membered ring optionally having additional heteroatoms at the ring vertices.

6. The compound according to claim 2, wherein Ar^1 is substituted phenyl.

7. The compound according to claim 6, having the formula:

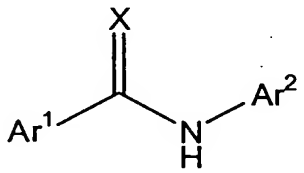


wherein,

R^5 and R^6 are members independently selected from the group consisting of H, halogen, substituted or unsubstituted alkyl, halo(C_1-C_4)alkyl, nitro, cyano and substituted or unsubstituted phenyl, with the proviso that both R^5 and R^6 are not H.

8. The compound according to claim 7, wherein R^5 and R^6 are members independently selected from the group consisting of H, F, and Cl, with the proviso that both R^5 and R^6 are not H.

9. A method of increasing ion flow through voltage-dependent potassium channels in a cell, said method comprising contacting said cell with a potassium channel-opening amount of a compound of the formula:



wherein

Ar^1 and Ar^2 are each members independently selected from the group consisting of aryl, substituted aryl, heteroaryl and substituted heteroaryl; and

X is a member selected from the group consisting of O, S and N-R^1,

wherein R^1 is a member selected from the group consisting of H, (C_1-C_8)alkyl, substituted (C_1-C_8)alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl(C_1-C_4)alkyl, substituted aryl(C_1-C_4)alkyl, CN, -C(O)R^2, -OR^3, -C(O)NR^3R^4, and -S(O)$_2$NR^3R^4;

wherein R^2 is a member selected from the group consisting of (C_1-C_8)alkyl, substituted (C_1-C_8)alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl(C_1-C_4)alkyl and substituted aryl(C_1-C_4)alkyl; and

R^3 and R^4 are each members independently selected from the group consisting of hydrogen, (C_1-C_8)alkyl, substituted (C_1-C_8)alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl(C_1-C_4)alkyl and substituted aryl(C_1-C_4)alkyl, or R^3 and R^4 can be combined with the nitrogen to which each is attached to form a 5-, 6- or

7-membered ring optionally having additional heteroatoms at the ring vertices.

10. The method according to claim **9**, wherein said voltage-dependent potassium channel is responsible for the M-current.

11. The method according to claim **9**, wherein said voltage-dependent potassium channel comprises KCNQ subunits.

12. The method according to claim **9**, wherein Ar^1 is a member selected from the group consisting of phenyl, substituted phenyl, indolyl, substituted indolyl, benzofuranyl, substituted benzofuranyl, furanyl, substituted furanyl, thienyl, substituted thienyl, isothiazolyl, substituted isothiazolyl, pyrazolyl and substituted pyrazolyl.

13. The method according to claim **9**, wherein Ar^1 is substituted phenyl, substituted or unsubstituted 2-indolyl and substituted or unsubstituted 2-thienyl.

14. The method according to claim **9**, wherein X is O.

15. The method according to claim **13**, wherein the Ar^1 substituents are selected from the group consisting of halogen, alkyl, halo(C_1-C_4)alkyl, (C_1-C_4)alkoxy, halo(C_1-C_4)alkoxy, nitro, cyano, -NHC(O)R^7, -NHR^7, phenyl and substituted phenyl, wherein

R^7 is a member selected from hydrogen, (C_1-C_8)alkyl, substituted (C_1-C_8)alkyl, cycloalkyl, substituted cycloalkyl, heteroalkyl, substituted heteroalkyl, heterocyclyl, substituted heterocyclyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl(C_1-C_4)alkyl and substituted aryl(C_1-C_4)alkyl, or R^7 can be combined with the nitrogen to which it is attached to form a 5-, 6- or 7-membered ring optionally having additional heteroatoms at the ring vertices.

16. The method according to claim **9**, wherein Ar^2 is selected from the group consisting of heteroaryl and substituted heteroaryl.

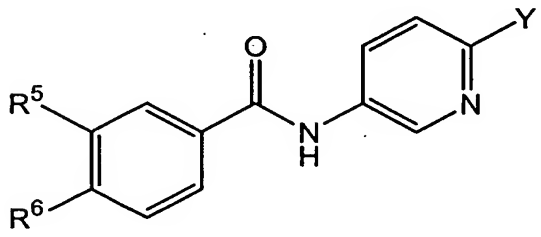
17. The method according to claim **9**, wherein Ar^1 is substituted aryl; Ar^2 is heteroaryl or substituted heteroaryl; and X is O.

18. The method according to claim 15, wherein Ar^2 is pyridyl or substituted pyridyl.

19. The method according to claim 18, wherein Ar^2 is selected from the group consisting of 6-methyl-3-pyridyl and 2-chloro-5-pyridyl.

20. The method according to claim 18, wherein Ar^1 is substituted phenyl.

21. The method according to claim 20, said compound having the formula:

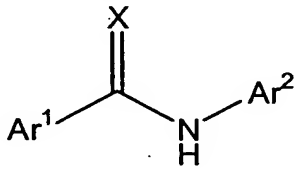


wherein,

R^5 and R^6 are members independently selected from the group consisting of H, halogen, alkyl, halo(C_1-C_4)alkyl, nitro, cyano and phenyl, with the proviso that both R^5 and R^6 are not H.

22. The method according to claim 21, wherein R^5 and R^6 are members independently selected from the group consisting of H, F, and Cl, with the proviso that both R^5 and R^6 are not H.

23. A method of treating a central or peripheral nervous system disorder or condition through modulation of a voltage-dependent potassium channel, said method comprising administering to a subject in need of such treatment, an effective amount of a compound having the formula:



wherein

Ar^1 and Ar^2 are each members independently selected from the group consisting of aryl, substituted aryl, heteroaryl and substituted heteroaryl; and

X is a member selected from the group consisting of O, S and N-R^1,

wherein R^1 is a member selected from the group consisting of H, $(C_1\text{-}C_8)$alkyl, substituted $(C_1\text{-}C_8)$alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl$(C_1\text{-}C_4)$alkyl, substituted aryl$(C_1\text{-}C_4)$alkyl, CN, $-C(O)R^2$, $-OR^3$, $-C(O)NR^3R^4$, and $-S(O)_2NR^3R^4$;

wherein R^2 is a member selected from the group consisting of $(C_1\text{-}C_8)$alkyl, substituted $(C_1\text{-}C_8)$alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl$(C_1\text{-}C_4)$alkyl and substituted aryl$(C_1\text{-}C_4)$alkyl; and

R^3 and R^4 are each members independently selected from the group consisting of hydrogen, $(C_1\text{-}C_8)$alkyl, substituted $(C_1\text{-}C_8)$alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl$(C_1\text{-}C_4)$alkyl and substituted aryl$(C_1\text{-}C_4)$alkyl, or R^3 and R^4 can be combined with the nitrogen to which each is attached to form a 5-, 6- or 7-membered ring optionally having additional heteroatoms at the ring vertices.

24. The method according to claim **23**, wherein said disorder or condition is selected from the group consisting of migraine, ataxia, Parkinson's disease, bipolar disorders, spasticity, mood disorders, brain tumors, psychotic disorders, myokymia, seizures, epilepsy, hearing loss, vision loss, Alzheimer's disease, age-related memory loss, learning deficiencies, motor neuron diseases, and stroke.

25. The method according to claim **24**, wherein said disorder or condition is hearing loss.

26. The method according to claim **24**, wherein said disorder or condition is epilepsy or seizures.

27. The method according to claim 23, wherein Ar^1 is a member selected from the group consisting of phenyl, substituted phenyl, indolyl, substituted indolyl, benzofuranyl, substituted benzofuranyl, furanyl, substituted furanyl, thienyl, substituted thienyl, isothiazolyl, substituted isothiazolyl, pyrazolyl and substituted pyrazolyl.

28. The method according to claim 27, wherein Ar^1 is substituted aryl, substituted or unsubstituted 2-indolyl and substituted or unsubstituted 2-thienyl.

29. The method according to claim 28, wherein X is O.

30. The method according to claim 28, wherein the Ar^1 substituents are selected from the group consisting of halogen, alkyl, halo(C_1-C_4)alkyl, (C_1-C_4)alkoxy, halo(C_1-C_4)alkoxy, nitro, cyano, -NHC(O)R^7, -NHR^7, phenyl and substituted phenyl, wherein

R^7 is a member selected from hydrogen, (C_1-C_8)alkyl, substituted (C_1-C_8)alkyl, cycloalkyl, substituted cycloalkyl, heteroalkyl, substituted heteroalkyl, heterocyclyl, substituted heterocyclyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl(C_1-C_4)alkyl and substituted aryl(C_1-C_4)alkyl, or R^7 can be combined with the nitrogen to which it is attached to form a 5-, 6- or 7-membered ring optionally having additional heteroatoms at the ring vertices.

31. The method according to claim 23, wherein Ar^2 is selected from the group consisting of heteroaryl and substituted heteroaryl.

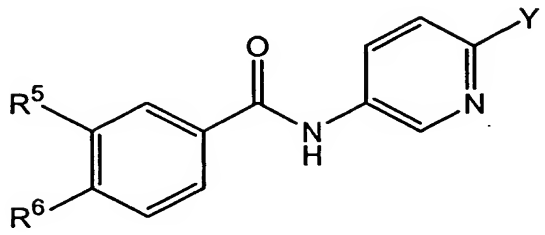
32. The method according to claim 23, wherein Ar^1 is substituted aryl; Ar^2 is heteroaryl or substituted heteroaryl; and X is O.

33. The method according to claim 31, wherein Ar^2 is pyridyl or substituted pyridyl.

34. The method according to claim 33, wherein Ar^2 is selected from the group consisting of 6-methyl-3-pyridyl and 2-chloro-5-pyridyl.

35. The method according to claim 34, wherein Ar^1 is substituted phenyl.

36. The method according to claim 35, said compound having the formula:

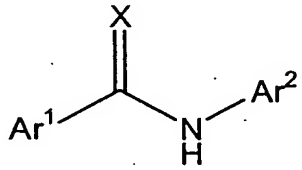


wherein,

R^5 and R^6 are members independently selected from the group consisting of H, halogen, alkyl, halo(C_1-C_4)alkyl, nitro, cyano and phenyl, with the proviso that both R^5 and R^6 are not H.

37. The method according to claim 36, wherein R^5 and R^6 are members independently selected from the group consisting of H, F, and Cl, with the proviso that both R^5 and R^6 are not H.

38. A composition comprising a pharmaceutically acceptable excipient and a compound of the formula:



wherein,

Ar^1 and Ar^2 are each members independently selected from the group consisting of aryl, substituted aryl, heteroaryl and substituted heteroaryl; and

X is a member selected from the group consisting of O, S and N-R^1,

wherein R^1 is a member selected from the group consisting of H, (C_1-C_8)alkyl, substituted (C_1-C_8)alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl(C_1-C_4)alkyl, substituted aryl(C_1-C_4)alkyl, CN, -C(O)R^2, -OR^3, -C(O)NR^3R^4, and -S(O)$_2$NR^3R^4;

wherein R^2 is a member selected from the group consisting of (C_1-C_8)alkyl, substituted (C_1-C_8)alkyl, aryl, substituted aryl,

heteroaryl, substituted heteroaryl, aryl(C_1-C_4)alkyl and substituted aryl(C_1-C_4)alkyl; and

R^3 and R^4 are each members independently selected from the group consisting of hydrogen, (C_1-C_8)alkyl, substituted (C_1-C_8)alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl(C_1-C_4)alkyl and substituted aryl(C_1-C_4)alkyl, or R^3 and R^4 can be combined with the nitrogen to which each is attached to form a 5-, 6- or 7-membered ring optionally having additional heteroatoms at the ring vertices.

39. The composition according to claim **38**, wherein Ar^1 is substituted aryl, substituted or unsubstituted 2-indolyl and substituted or unsubstituted 2-thienyl.

40. The composition according to claim **38**, wherein X is O.

41. The composition according to claim **40**, wherein the Ar^1 substituents are selected from the group consisting of halogen, alkyl, halo(C_1-C_4)alkyl, (C_1-C_4)alkoxy, halo(C_1-C_4)alkoxy, nitro, cyano, -NHC(O)R^7, -NHR^7, phenyl and substituted phenyl, wherein

R^7 is a member selected from hydrogen, (C_1-C_8)alkyl, substituted (C_1-C_8)alkyl, cycloalkyl, substituted cycloalkyl, heteroalkyl, substituted heteroalkyl, heterocyclyl, substituted heterocyclyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, aryl(C_1-C_4)alkyl and substituted aryl(C_1-C_4)alkyl, or R^7 can be combined with the nitrogen to which it is attached to form a 5-, 6- or 7-membered ring optionally having additional heteroatoms at the ring vertices.

42. The composition according to **38**, wherein Ar^2 is selected from the group consisting of heteroaryl and substituted heteroaryl.

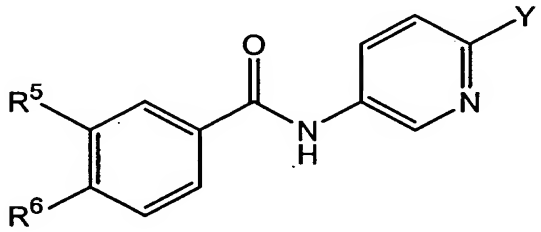
43. The composition according to claim **38**, wherein Ar^1 is substituted aryl; Ar^2 is heteroaryl or substituted heteroaryl; and X is O.

44. The composition according to claim **42**, wherein Ar^2 is pyridyl or substituted pyridyl.

45. The composition according to claim **44**, wherein Ar^2 is selected from the group consisting of 6-methyl-3-pyridyl and 2-chloro-5-pyridyl.

46. The composition according to claim **44**, wherein Ar^1 is substituted phenyl.

47. The composition according to claim **46**, said compound having the formula:



wherein,

R^5 and R^6 are members independently selected from the group consisting of H, halogen, alkyl, halo(C_1-C_4)alkyl, nitro, cyano and phenyl, with the proviso that both R^5 and R^6 are not H.

48. The composition according to claim **47**, wherein R^5 and R^6 are members independently selected from the group consisting of H, F, and Cl, with the proviso that both R^5 and R^6 are not H.